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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/065,556

10/30/2002

Ronald Hugh Miller

201-1454 FAM

7620

28549

7590

04/20/2004

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EXAMINER

LA, ANH V

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,556

Applicant(s)

MILLER ET AL.

Examiner

Anh V La

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The claims are objected to because there is a typographical error. In claim 5, lines 1-2, the phrase "said a rear-facing" should be changed to - -said rear-facing--.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-8, 10-15, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta (US 6,424,273) in view of Breed (US 2002/0005778).

Regarding claims 1, 7, and 13, Gutta discloses a warning system/method for a subject vehicle proximate a rear approaching vehicle comprising a rear-facing camera 16, 12, 14, generating a plurality of images, the camera having a rear field of view adjacent to a blind spot (see figure 2), an indicator 24, a controller 18, 20, 22 coupled to the indicator receiving the plurality of images, the controller generating an identification 20, a position 18, and a track (column 3, line 50- col. 4, line 3) for a rear approaching vehicle from the plurality of images, the controller activating the indicator when the rear approaching vehicle transitioning into a blind spot from the rear field of view as determined in response to the identification, track and position (col. 2, lines 25-49). Gutta does not clearly disclose the identification being a size. Breed teaches that is well-known to have an identification being a size (paragraph 113). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to

include the identification being a size to the system/method of Gutta as taught by Breed for the purpose of effectively monitoring the blind spot of the vehicle.

Regarding claims 2, 8, Gutta discloses the camera has a rear field of view adjacent to and including a portion the blind spot (see figure 2).

Regarding claims 4 and 10, Gutta discloses all the claimed subject matter as set forth above in the rejection of claim 1, but still does not disclose a fuzzy neural network in the controller. Breed teaches the use of a fuzzy neural network in a controller (p. 113). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a fuzzy neural network in the controller to the system of Gutta as taught by Breed for the purpose of effectively classifying the object in response to the size, track and position signal.

Regarding claims 5, 11, 17, Gutta discloses the rear-facing camera being disposed on the rear of the vehicle (see fig. 2).

Regarding claims 6, 12, Gutta clearly discloses the camera being mounted to a rear panel of the subject vehicle (see fig. 2).

Regarding claim 14, Gutta discloses the step of determining a trajectory from the plurality of images of the object (fig. 1).

Regarding claim 15, Gutta discloses a plurality of images from a camera (fig. 1, col. 2, lines 28-48).

Regarding claim 18, Gutta discloses all the claimed subject matter as set forth above in the rejection of claim 1, but still does not disclose an audible warning. Breed teaches the use of an audible warning (figure 16). It would have been obvious at the

Art Unit: 2636

time the invention was made to a person having ordinary skill in the art to include an audible warning to the method of Gutta as taught by Breed for the purpose of audibly indicating a warning information.

Regarding claim 19, Gutta discloses a visual warning 24.

4. Claims 3, 9, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta in view of Breed as applied to claim 1 above, and further in view Schnee.

Regarding claims 3, 9, and 16, Gutta as modified by Breed discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose a low light camera. Schnee teaches the use of a low light camera (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a low light camera to the system/method of Gutta as taught by Schnee for the purpose of effectively monitoring the blind spot of the vehicle.

Answer to Remarks

5. Applicant's arguments filed February 05, 2004 have been fully considered.

Applicant has argued that Gutta and Breed do not teach a rear-facing camera having a rear field of view that is adjacent to a blind spot. This argument is not found persuasive. Gutta clearly discloses a rear-facing camera 16, 12, 14 having a rear field of view that is adjacent to a blind spot (see figure 2).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


Art Unit: 2636

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh V La whose telephone number is (703) 305-3967. The examiner can normally be reached on Mon-Fri from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on (703) 305-4717. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


ANH V. LA
PRIMARY EXAMINER

Anh V La
Primary Examiner
Art Unit 2636

AI
April 15, 2004